	(FILE	'USPAT' ENTERED AT 15:43:07 ON 28 JUN 1999)
L1		QUE DATA (2A) PROTECT?
L2		QUE UTILIZ? OR USE? OR USING
L3		QUE ALLOW? OR PERMI?
L4		QUE JUDG? OR COMPAR?
L5		QUE COPYRIGHT? OR COPY OR COPYING OR DUPLICAT?
L6		398 S L1 (P) L2 (P) L3
L7		QUE FORBID? OR PROHIBIT?
L8		65 S (LG AND L7 / Seanned)
L9		QUE APPEND? OR ATTACH? OR ADD?
L10		QUE APPEND? OR ATTACH? OR ADDING? OR ADDED OR ADDS
L11		55 S L8 AND L10
L12		QUE STOR? OR SAY?
L13		55 S (L12 AND L11) mage search
		QUE STOR? OR SAY? 55 S L12 AND L11 (SEARCH) SAVE -L13 PROTECTDATA/L

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US PAT NO:

5,392,351 [IMAGE AVAILABLE]

ANS: 1

Mar. 16, 1992

DATE ISSUED:

Feb. 21, 1995

TITLE:

Electronic data protection system Takayuki Hasebe, Kawasaki, Japan Ryota Akiyama, Kawasaki, Japan

Makoto Yoshioka, Kawasaki, Japan Fujitsu Limited, Kanagawa, Japan (foreign corp.)

ASSIGNEE:

INVENTOR:

08/031,339

APPL-NO: DATE FILED:

Mar. 15, 1993

FRN-PRIOR:

INT-CL:

Japan

US-CL-ISSUED:

[6] H04L 9/32 380/4, 25

US-CL-CURRENT: SEARCH-FLD:

380/4, 25 380/4, 25

REF-CITED:

U.S. PATENT DOCUMENTS

4-058048

4,683,553	7/1987	Mollier	380/4
4,757,534	7/1988	Matyas et al.	380/25
4,850,017	7/1989	Matyas, Jr. et al.	000/4
5,010,571	4/1991	Katznelson	380/4
5,058,162	10/1991	Santon et al.	380/4 X
5,065,429	11/1991	Lang	380/4 X

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0114522		European		
0268139	5/1988	European	Patent	Office
	4/1001	Tonon		

4/1991 Japan 3-83132

3/1988 World Intellectual Property 88-02202

Organization

OTHER PUBLICATIONS

Computer vol. 17, No. 4, (Apr. 1984) Long Beach, Calif., USA; Combatting Software Piracy by Encryption and Key Management.

ART-UNIT:

222

PRIM-EXMR:

Gilberto Barron, Jr.

LEGAL-REP:

Nikaido, Marmelstein, Murray & Oram

ABSTRACT: An electronic data protection system for protecting electronic data from illegal copying by a third party, includes: a storage medium for storing an encrypted electronic data, a medium number and encrypted permission information; a vendor computer having a personal key generating unit for generating a medium key based on the medium number, an electronic data decrypting key, and an encrypting unit for encrypting the electronic data decrypting key based on the medium key to generate the encrypted permission information; and a user computer having a personal key generating unit for generating a medium key based on the medium number, a decrypting unit for decrypting the encrypted permission information based on the medium key to generate the electronic data decrypting key which is the same as the electronic data decrypting key of the vendor computer, and a decrypting unit for decrypting the encrypted electronic data based on the electronic data decrypting key to generate a plain text electronic data.

10 Claims, 22 Drawing Figures

US PAT NO:

5,555,304 [IMAGE AVAILABLE]

ANS: 2

DATE ISSUED:

Sep. 10, 1996

TITLE:

Storage medium for preventing an illegal use by a third

=> d 5392351 5555304 5796824 5917908 ab

US PAT NO:

5,392,351 [IMAGE AVAILABLE]

ANS: 1

ABSTRACT:

An electronic data protection system for protecting electronic data from illegal copying by a third party, includes: a storage medium for storing an encrypted electronic data, a medium number and encrypted permission information; a vendor computer having a personal key generating unit for generating a medium key based on the medium number, an electronic data decrypting key, and an encrypting unit for encrypting the electronic data decrypting key based on the medium key to generate the encrypted permission information; and a user computer having a personal key generating unit for generating a medium key based on the medium number, a decrypting unit for decrypting the encrypted permission information based on the medium key to generate the electronic data decrypting key which is the same as the electronic data decrypting key of the vendor computer, and a decrypting unit for decrypting the encrypted electronic data based on the electronic data decrypting key to generate a plain text electronic data.

US PAT NO:

5,555,304 [IMAGE AVAILABLE]

ANS: 2

ABSTRACT:

A storage medium stores encrypted electronic data, a medium personal number which is unique for each storage medium and encrypted permission information. At least the medium personal number is written onto the storage medium in an un-rewritable form which a user computer cannot rewrite.

US PAT NO:

5,796,824 [IMAGE AVAILABLE]

ANS: 3

ABSTRACT:

A storage medium stores encrypted electronic data, a medium personal number which is unique for each storage medium and encrypted permission information. At least the medium personal number is written onto the storage medium in an un-rewritable form which a user computer cannot rewrite.

TEXT DATA FOR PATENT (5,917,908 IS NOT AVAILABLE,)

SEE THE MICROFILE OR

PAPER INSTEAD

5761651 5832083

part

Takayuk Hasebe, Kawasaki, Japan INVENTOR: Ryota yama, Kawasaki, Japan

Makoto Toshioka, Kawasaki, Japan Fujitsu Limited, Kanagawa, Japan (foreign corp.) ASSIGNEE:

Mar. 15, 2013 DISCL-DATE: 08/341,176 APPL-NO:

Nov. 18, 1994 DATE FILED: Division of Ser. No. 31,339, Mar. 15, 1993, Pat. No. REL-US-DATA:

5,392,351.

Mar. 16, 1992 4-058048 FRN-PRIOR: Japan

[6] HO4L 9/32; GO6F 12/14 INT-CL:

380/4, 25 US-CL-ISSUED: 380/4, 25 US-CL-CURRENT: 380/4, 25 SEARCH-FLD:

REF-CITED:

U.S. PATENT DOCUMENTS

4,683,553 7/1987 Mollier 4,757,534 7/1988 Matyas et al.	380/25
4,785,361 11/1988 Brotby 4,850,017 7/1989 Matyas, Jr. et al.	380/4 X 380/21 380/4 X
4,866,769 9/1989 Karp 5,010,571 4/1991 Katznelson 5,058,162 10/1991 Santon et al.	380/4 380/25
5,065,429 11/1991 Lang 5,199,066 3/1993 Logan	380/25 380/4 X 380/4 X
5,276,735 1/1994 Boebert 5,287,408 2/1994 Samson 5,379,433 1/1995 Yamagishi	380/4 X 380/4 X

FOREIGN PATENT DOCUMENTS

8/1984 European Patent Office 0144522 5/1988 European Patent Office 0268139 4/1991 Japan 3-83132

World Intellectual Property 3/1988 W088/02202 Organization

OTHER PUBLICATIONS

Albert et al., Computer, vol. 17, No. 4, Apr., 1984, Long Beach, California "Combatting Software Piracy by Encryption and Key Management".

222 ART-UNIT:

Gilberto Barron, Jr. PRIM-EXMR:

Nikaido, Marmelstein, Murray & Oram LLP LEGAL-REP:

ABSTRACT:

A storage medium stores encrypted electronic data, a medium personal number which is unique for each storage medium and encrypted permission information. At least the medium personal number is written onto the storage medium in an un-rewritable form which a user computer cannot rewrite.

28 Claims, 23 Drawing Figures

ANS: 3 5,796,824 [IMAGE AVAILABLE] US PAT NO:

Aug. 18, 1998 DATE ISSUED:

Storage medium for preventing an irregular use by a third TITLE:

party

Takayuki Hasebe, Kawasaki, Japan INVENTOR: Ryota Akiyama, Kawasaki, Japan

Makoto Yoshioka, Kawasaki, Japan

Fujitsu Limited, Kanagawa, Japan (foreign corp.) ASSIGNEE:

08/603,760 APPL-NO: Feb. 20, 1996 DATE FILED:

Division of Ser. No. 341,176, Nov. 18, 1994, Pat. No. REL-US-DATA:

io. 31,339, Mar. 5,55 94, which is a division of Ser 15, 1, 3, Pat. No. 5, 392, 351. Mar. 16, 1992 4-058048 Japan [6] H04L 9/32380/4, 25 US-CL-CURRENT: 380/4, 25 380/4, 25

REF-CITED: U.S. PATENT DOCUMENTS Comerford et al. 3/1986 4,577,289 Mollier

7/1987 4,683,553 Matyas et al. 7/1988 4,757,534 Brotby 11/1988

4,785,361 Matyas, Jr. et al. 4,850,017 7/1989

9/1989 Karp 4,866,769

Katznelson 4/1991 5,010,571 Santon et al. 10/1991 5,058,162

11/1991 Lang 5,065,429 3/1993 Logan 5,199,066

Boebert et al. 1/1994 5,276,735

2/1994 Samson 5,287,408 1/1995 Yamagishi 5,379,433

FOREIGN PATENT DOCUMENTS

8/1984 European Patent Office 0 144 522 5/1988 European Patent Office 0 268 139

4/1991 Japan 3-83132

World Intellectual Property 3/1988 WO 88/02202 Organization

OTHER PUBLICATIONS

Albert et al., Computer, vol. 17, No. 4, Apr., 1984, Long Beach, California, "Combatting Software Piracy by Encryption and Key Management".

222 ART-UNIT:

Gilberto Barron, Jr. PRIM-EXMR:

Nikaido Marmelstein Murray & Oram LLP LEGAL-REP:

ABSTRACT:

FRN-PRIOR:

US-CL-ISSUED:

SEARCH-FLD:

INT-CL:

A storage medium stores encrypted electronic data, a medium personal number which is unique for each storage medium and encrypted permission information. At least the medium personal number is written onto the storage medium in an un-rewritable form which a user computer cannot rewrite.

16 Claims, 23 Drawing Figures

ANS: 4 5,832,083 [IMAGE AVAILABLE] US PAT NO:

Nov. 3, 1998 DATE ISSUED:

Method and device for utilizing data content TITLE:

Noboru Iwayama, Kawasaki, Japan INVENTOR:

Naoya Torii, Kawasaki, Japan Takayuki Hasebe, Kawasaki, Japan Masahiko Takenaka, Kawasaki, Japan Masahiro Matsuda, Kawasaki, Japan

Fujitsu Limited, Kawasaki, Japan (foreign corp.) ASSIGNEE:

08/509,285 APPL-NO: Jul. 31, 1995 DATE FILED:

Sep. 9, 1994 6-252623 Japan FRN-PRIOR: [6] H04K 1/00 INT-CL:

380/4, 25 US-CL-ISSUED: US-CL-CURRENT: 380/4, 25 380/4, 25, 21 SEARCH-FLD:

REF-CITED:

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4,439,670	3/15-4	Bassett et al.
4,446,519	5/1	Thomas
4,484,217	11/1984	Block et al.
4,558,176	12/1985	Arnold et al.
4,590,557	5/1986	Lillie
4,646,234	2/1987	Tolman et al.
4,649,510	3/1987	Schmidt
4,654,799	3/1987	Ogaki et al.
4,658,093	4/1987	Hellman
4,672,554	6/1987	Ogaki
4,674,055	6/1987	Ogaki et al.
4,740,890	4/1988	William
4,780,905	10/1988	Cruts et al.
4,787,050	11/1988	Suzuki
4,816,653	3/1989	Anderl et al.
4,816,654	3/1989	Anderl et al.
4,817,140	3/1989	Chandra et al.
4,864,516	9/1989	Gaither et al.
4,879,645	11/1989	Tamada et al.
4,949,257	8/1990	Orbach
4,999,806	3/1991	Chernow et al.
5,006,849	4/1991	Baarman et al.
5,008,814	4/1991	Mathur
5,014,234	5/1991	Edwards, Jr.
5,016,009	5/1991	Whiting et al.
5,051,822	9/1991	Rhoades
5,056,009	10/1991	Mizuta
5,103,392	4/1992	Mori
5,103,476	4/1992	Waite et al.
5,166,886	11/1992	Molnar et al.
5,181,107	1/1993	Rhoades
5,199,066	3/1993	Logan
5,214,697	5/1993	Saito
5,222,134	6/1993	Waite et al.
5,245,330	9/1993	Wassink
5,267,171	11/1993	Suzuki et al.
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Japanese Patent Laid-Open Publication No. 57-127249, Aug. 7, 1982 (equivalent to Japanese patent Publication No. 61-22815). Japanese Patent Laid-Open Publication No. 5-89363, Apr. 9, 1993. Japanese Patent Laid-Open Publication No. 5-266575, Oct. 15, 1993. Japanese Patent Laid-Open Publication No. 5-298085, Nov. 12, 1993. Japanese Patent Laid-Open Publication No. 6-95871, Apr. 8, 1994.

222 ART-UNIT:

David G. Cain PRIM-EXMR: Staas & Halsey LEGAL-REP:

ABSTRACT:

The present invention provides a data content utilizing device having data storing section for storing information obtained by encoding data contents and content identification information specifying the data contents, a utilization permitting device for generating utilization permission information used to decode data contents desired by a user and information converting section for loading data contents requested by the user from the data storing section and decoding the data contents only in the case where utilization permission information is generated by the utilization permitting device.

43 Claims, 21 Drawing Figures

US PAT NO: DATE ISSUED: TITLE:

5,761,651/[IMAGE AVAILABLE] 2,1998

ANS: 5

Software charging system and software data utilization

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ing device
                 perm
               Takayuk Hasebe, Kawasaki, Japan
INVENTOR:
                       ii, Kawasaki, Japan
               Naoya 1
               Noboru Iwayama, Kawasaki, Japan
               Masahiko Takenaka, Kawasaki, Japan
                Masahiro Matsuda, Kawasaki, Japan
                Fujitsu Limited, Kawasaki, Japan (foreign corp.)
ASSIGNEE:
                08/490,049
APPL-NO:
                Jun. 13, 1995
DATE FILED:
                                                               Aug. 10, 1994
                                   6-188667
                Japan
FRN-PRIOR:
                [6] GOOF 17/6Q
INT-CL:
                705/400, 30, 32
US-CL-ISSUED:
US-CL-CURRENT: 705/400, 30, 32
                194/215, 216, 217; 222/2; 364/400, 401, 406, 464.01,
SEARCH-FLD:
                  464.1; 380/4; 395/230, 232
REF-CITED:
                            U.S. PATENT DOCUMENTS
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      4,247,106
                                                              235/382
                             Basset et al.
      4,439,670
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                                                              395/491
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                             Arnold et al.
                  12/1985
      4,558,176
                                                              395/700
                             Lillie
                    5/1986
      4,590,557
                                                              364/401R
                             Volk
                    6/1986
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                                                              380/4 X
                             Tolman et al.
                    2/1987
      4,646,234
                                                              380/4
                             Schmidt
                    3/1987
      4,649,510
                                                              364/479
                             Ogaki et al.
                    3/1987
      4,654,799
                                                              380/25
                    4/1987
                             Hellman
      4,658,093
                                                              364/479
                             Ogaki
                    6/1987
      4,672,554
                                                              364/479
                             Ogaki et al.
                    6/1987
      4,674,055
                                                              380/4 X
                             William
                    4/1988
      4,740,890
                                                              380/44
                              Cruts et al.
                   10/1988
      4,780,905
                                                               364/479
                              Suzuki
                   11/1988
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                                                               364/406
                              Wiedemer
                    1/1989
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                              Anderl et al.
                    3/1989
      4,816,653
                                                               235/380
                              Anderl et al.
                    3/1989
       4,816,654
                                                               380/4
                              Chandra et al.
                    3/1989
       4,817,140
                                                               395/153
                              Gaither et al.
                    9/1989
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                                                               235/380 X
                              Tamada et al.
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                                                               380/4
                              Nashua et al.
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       4,937,863
                                                               364/401
                     8/1990
                              Orbach
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                              Chernow et al.
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       4,999,806
                                                               341/95
                              Baarman et al.
                     4/1991
       5,006,849
                                                               371/19 X
                              Mathur
                     4/1991
       5,008,814
                                                               395/186
                              Edwards, Jr.
                     5/1991
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                                                               358/86
                              Rhoades
                     9/1991
       5,051,822
                                                               393/490
                              Mizuta
                    10/1991
       5,056,009
                                                               380/4
                              Mori
       5,103,392
                     4/1992
                                                               380/4
                              Waite et al.
                     4/1992
       5,103,476
                                                               364/479
                              Molnar et al.
                    11/1992
       5,166,886
                                                               358/86
                              Rhoades
       5,181,107
                     1/1993
                                                               380/4
                               Logan
                     3/1993
       5,199,066
                                                                380/4
                               Saito
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                     5/1993
                                                                380/4
                               Waite et al.
                     6/1993
       5,222,134
                                                                340/825.34
                     9/1993
                               Wassink
        5,245,330
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                               Suzuki et al.
                    11/1993
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                                                                395/800
                               Hasuo et al.
                    11/1994
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                                                                364/464.01
                               Christiano
                     1/1995
        5,386,369
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57-127249	8/1982	Japan
5-89363	4/1993	Japan
5-266575	10/1993	Japan
5-298058	11/1993	Japan

4 Japan 6-95871 4/

ART-UNIT:

244

PRIM-EXMR: Edward

Cosimano

Staas & Halsey LEGAL-REP:

ABSTRACT:

A software charging system includes a utilization permitting device for giving permission to use a software storing medium storing ciphered programs or data (software); and an authorization center capable of communicating with the utilization permitting device for setting a utilizable amount, totalling utilization amounts and charging a user. The utilization permitting device includes: a utilization permission processing part having a clock for obtaining date and time data, and having a date and time data storing unit for storing obtained date and time data until obtaining next data and time data; and a utilization amount managing part for calculating a software utilization amount of an end user. A software utilization amount is managed based on the number of days at the utilization permission processing part.

- 1. 5,392,351, Feb. 21, 1995, Electronic data protection system; Takayuki Hasebe, et al., 380/4, 25 [IMAGE AVAILABLE]
- \rightarrow 2. 5,555,304, Sep. 10, 1996, Storage medium for preventing an illegal use by a third party; Takayuki Hasebe, et al., 380/4, 25 [IMAGE

- AVAILABLE]

 3. 5,761,651, Jun. 2, 1998, Software charging system and software data utilization permitting device; Takayuki Hasebe, et al., 705/400, 30, 32 [IMAGE AVAILABLE]
 - 4. 5,832,083, Nov. 3, 1998, Method and device for utilizing data content; Noboru Iwayama, et al., 380/4, 25 [IMAGE AVAILABLE]